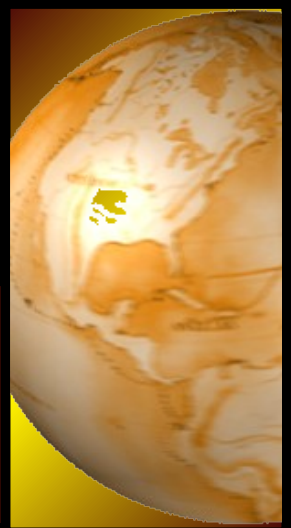
Two - Level Maintenance



GEN Kevin Byrnes

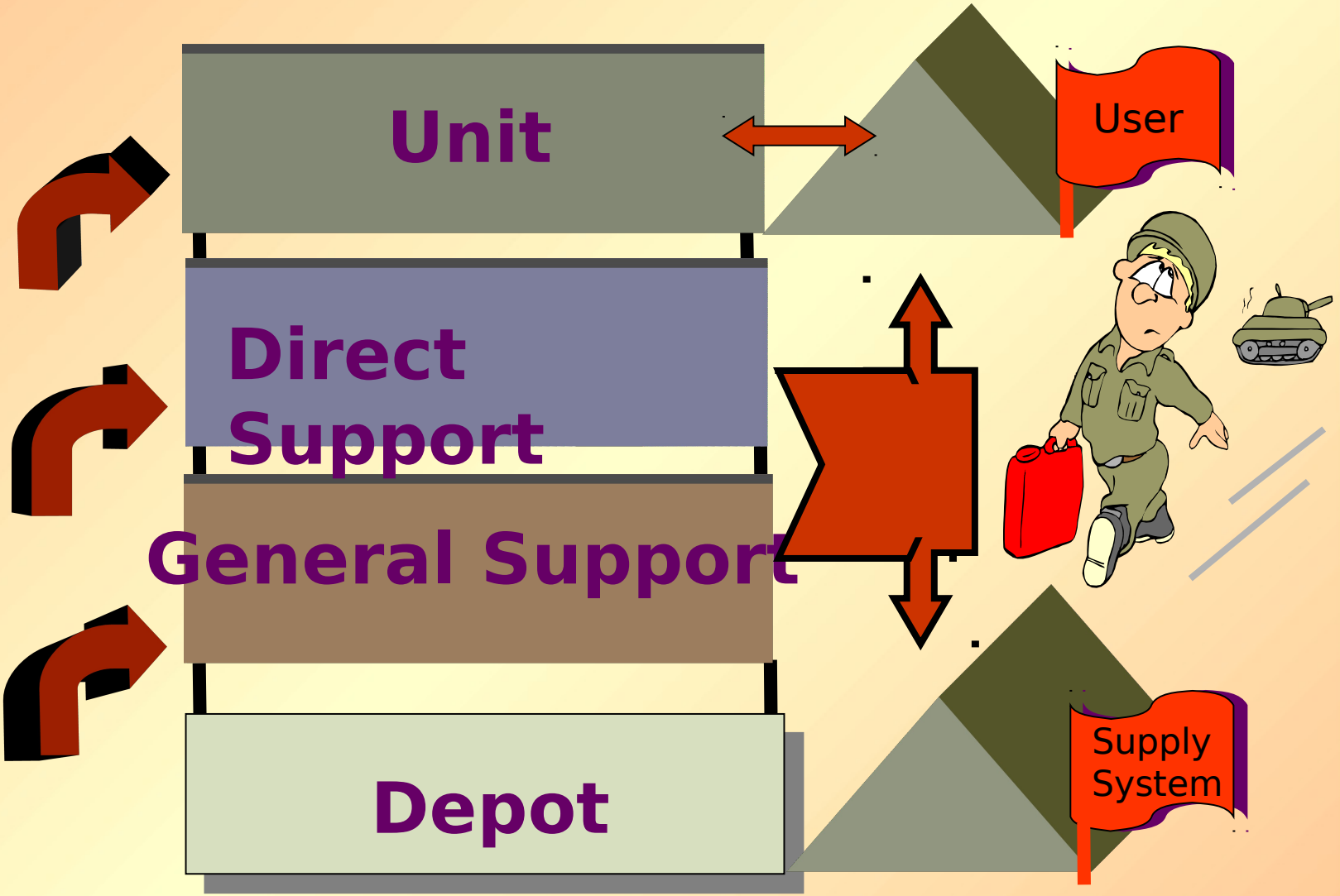
MG Mitchell H. Stevenson
Chief of Ordnance
30 May 2003

Purpose

- **Provide insight into our two-level maintenance work**

- **Explain the mergers we are working on & why**

60+ Years of Four Level Maintenance Doctrine

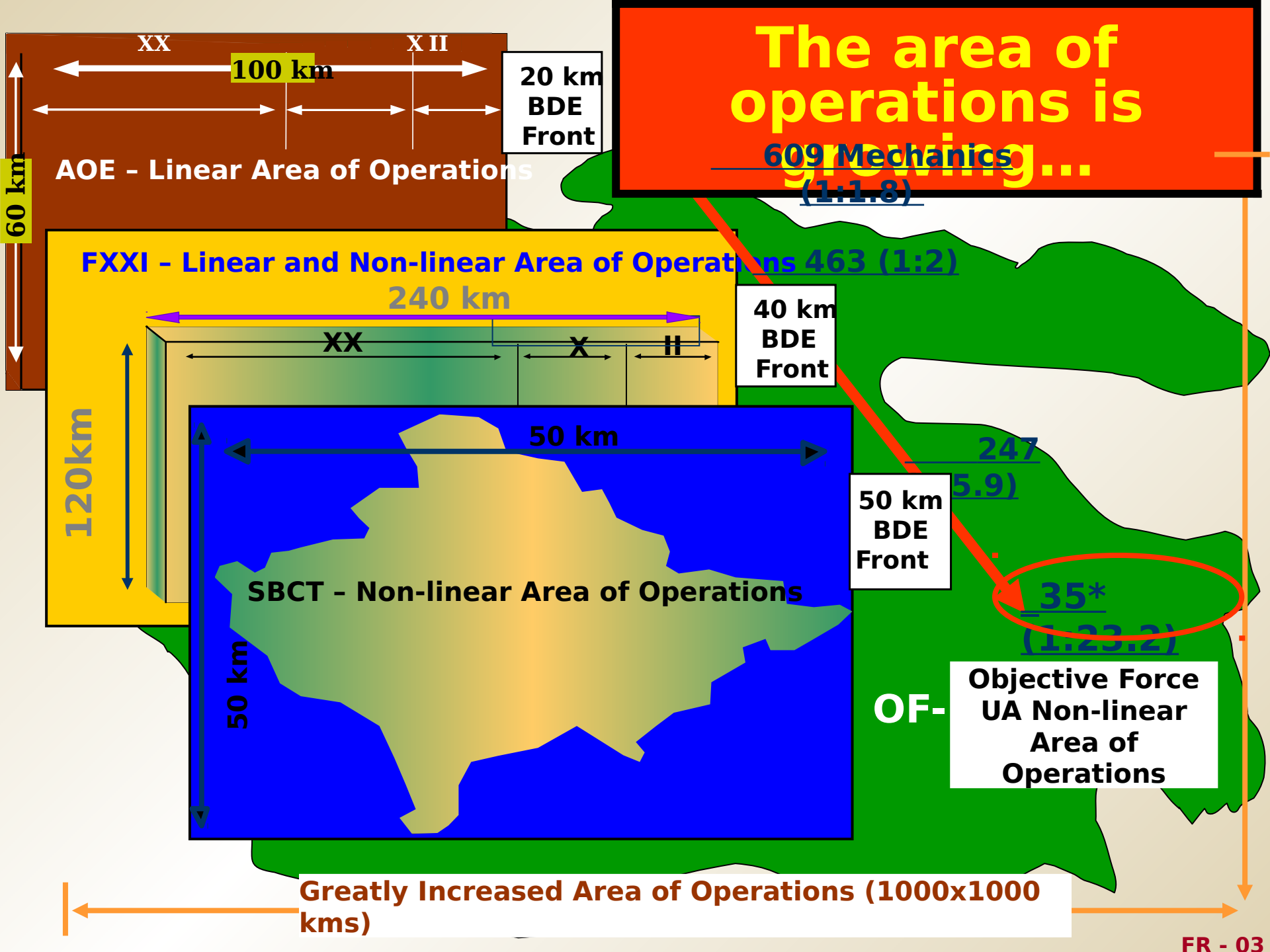


Maintenance Allocation Chart

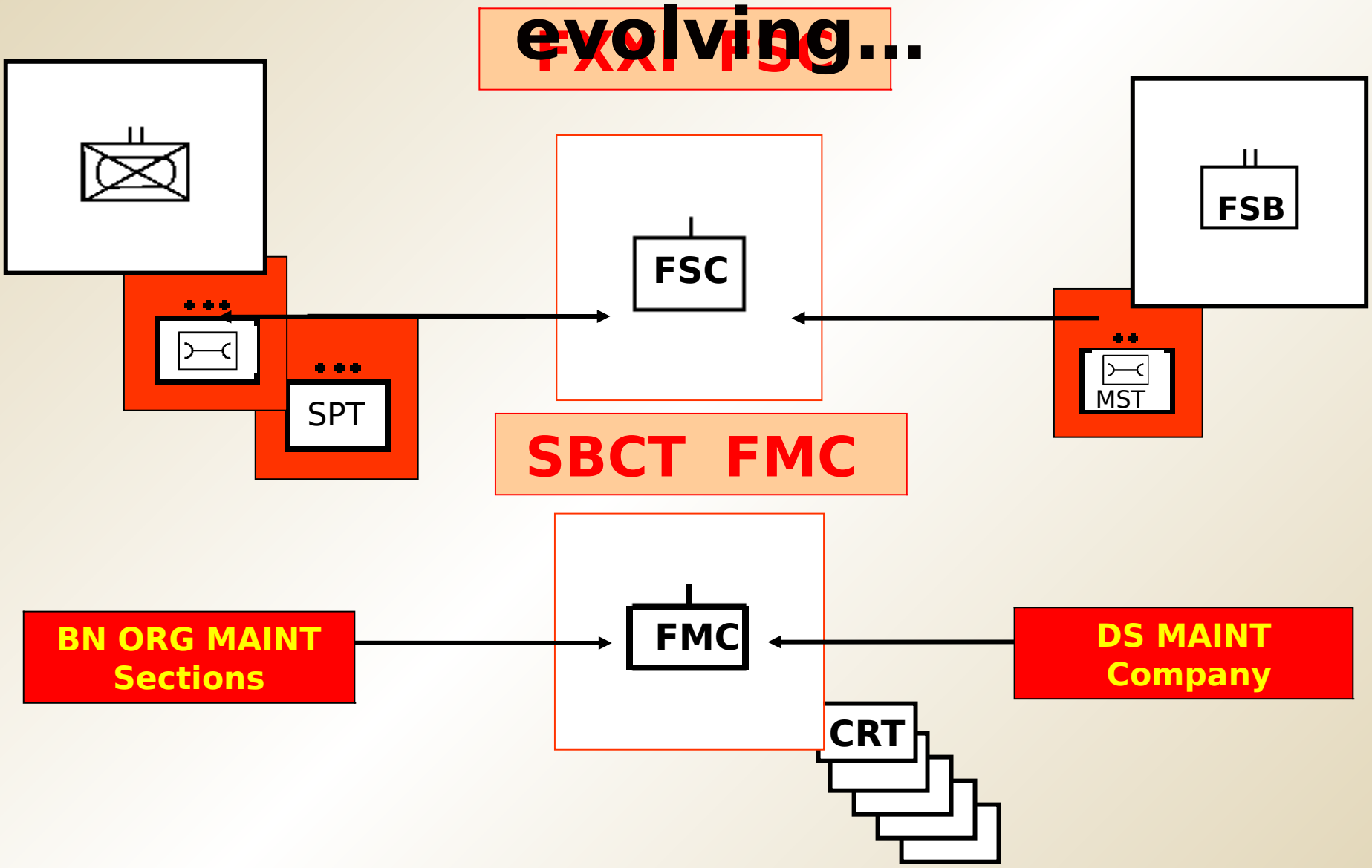
Component/ Assembly	Maintenance Function	Operator C	(ORG) O	(DS) F	(GS) H	Depot D
Engine	Inspect	0.1				
	Test		1.5			
	Service		2.0			
	Replace			8.0		
	Repair				16.7	
	Overhaul					40.0
Transmission	Inspect	0.2				
	Service	0.5				
	Replace			6.0		
	Repair		0.1	8.0	10.0	
	Overhaul					20.0

Characteristics of 4-Level Maintenance

- Echelon and intermediate
- Large logistics footprint
- Reliant on evacuation systems
- Built-in overhead burden
- Significant contribution to 6:1 CSS/CA support ratio
- Requires own maintenance support
- Not a 21st century concept

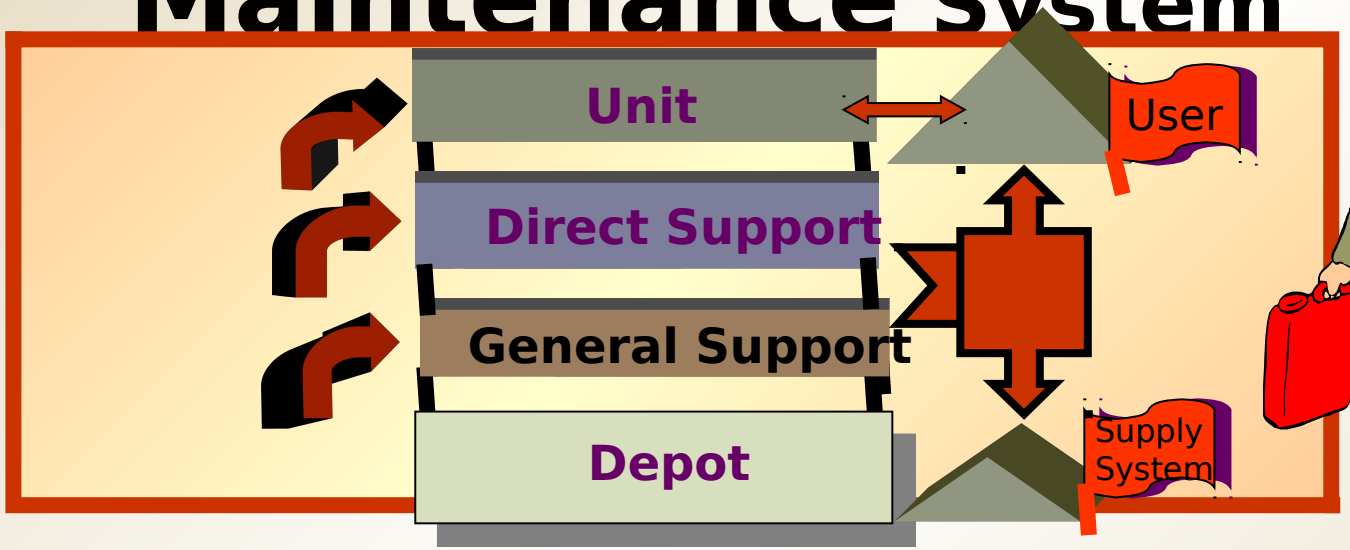

The area of operations is growing…
XX
X II
100 km
20 km BDE Front
60 km
AOE – Linear Area of Operations
609 Mechanics (1:1.8)
FXXI – Linear and Non-linear Area of Operations
463 (1:2)
240 km
XX
X
II
40 km BDE Front
120km
50 km
247 (1:5.9)
50 km BDE Front
SBCT – Non-linear Area of Operations
50 km
35* (1:23.2)
OF-
Objective Force UA Non-linear Area of Operations
Greatly Increased Area of Operations (1000x1000 kms)

In fact, we've been evolving…



…But what about the current fo

Current Maintenance System



A better way to do Maintenance
Two Levels

Replace…on-system
Repair & return to user
Largely a merging of Org & DS

Repair…off-system
Repair & return to stock
Largely a merging of GS & Depot

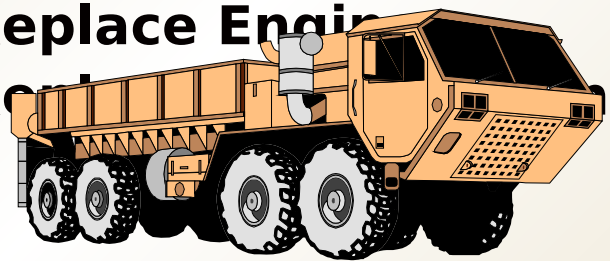
Field Maintenance

Sustainment Maintenance

Typical Two Level Maintenance Acti

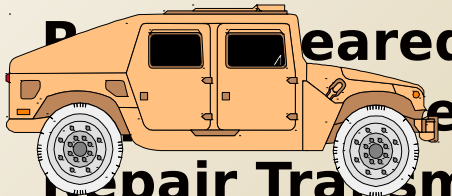
Field Maintenance Actions

- On-System
- Plug and Play Components
- Fewer Actions Requiring Tools
- Crew Level Maintenance Tasks
- Typical Replace Tasks:
  - Replace Starter
  - Replace Winch
  - Replace Electronic Module
  - Replace Geared Hubs
  - Replace Engi
  - Re



Sustainment Maintenance Actions

- Off-System
- Disassemble / Assemble
- Repair to National Standard
- Requires Wide Variety of Tools
- Typical Repair Tasks:
  - Repair Starter
  - Repair Winch
  - Repair Electronic Module
  - R eared Hubs
  - e
  - epair Transmission



Force Structure Implications at the Field Level of Maintenance

- **On-System** Automotive, Turret & Power Generation Equipment Repair (MSTs) organic to supported units

- **Small Arms** Repair organic to CA units

- **Low Density Maintenance MOSs**

Where will “Sustainment” (off-system) Maintenance Be?

- Depots
- Installation Maintenance Activities under the Direction of the NMM
- Component repair companies at EAD
- Component repair platoon in the MSB/DSB?
- Contractor Facilities?

Benefits of a Two-Level System

- Less Echelons
- Eliminates Duplication of Work
- Reduced “Handling” during evacuation
- Decreases Repair Cycle Time/Increases Readiness
- Reduced Logistics Footprint
- Syncs well with SSF/NMM
- Increased Flexibility and Depth of Capabilities

Will we lose mechanics?

100 HMMWV (4-Levels of Maintenance)				
LEVEL	UNIT	DS	GS	DEPOT
AMMH	235.1	71.0	54.0	N/A
MOS	63B	63W	63W	
FACTOR	3176	3230	3778	
MY	7.4	2.2	1.4	

100 HMMWV (2-Levels of Maintenance)		
LEVEL	FIELD	SUSTAINMENT*
AMMH	284.8	75.3
MOS	63B	63B
FACTOR	3176	3778
MY	9	2.0

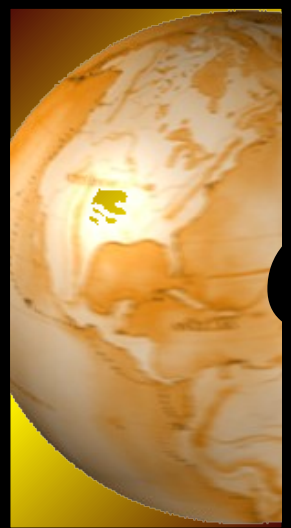
*Assumes 30% of current DS Tasks migrate to “Sustainment” Echelon

Where We Are…

- ✓ **Formed ICT – met 4 times already**
- ✓ **Studied impact on HMMWV, HEMTT, ABRAMS**
  - **. . TMs**
  - **. . MACs**
  - **. . NMWRs**
- ✓ **Task Migration boards at TACOM & CECOM**
- ✓ **G-4 Memo; endorsed by CG, TRADOC**
- ✓ **Working Force Structure Implications in FDUs**
  - **. . Personnel**
  - **. . Equipment**

Automotive MOS Mergers

in Support of the "Field" Level of Maintenance

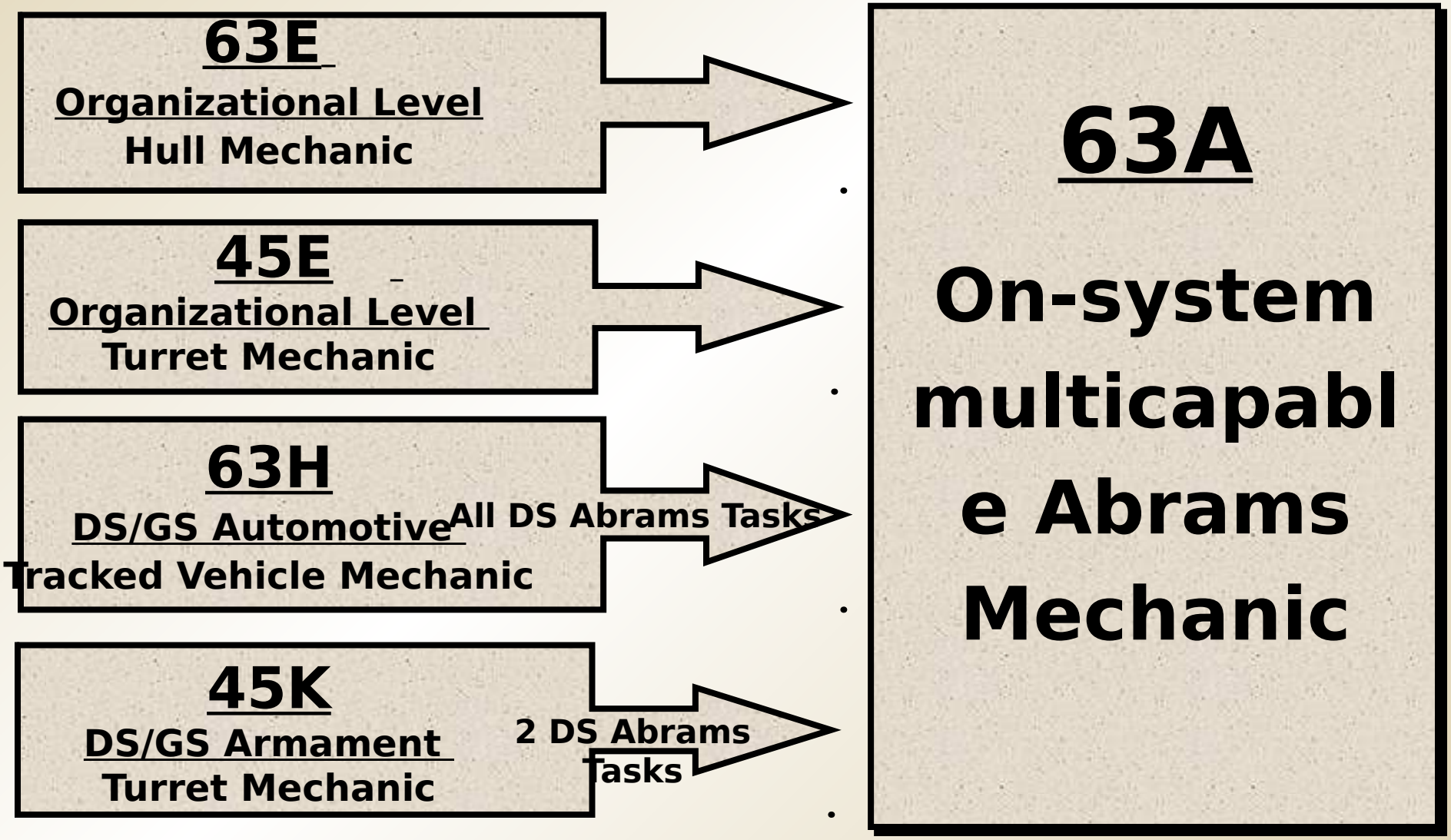


GO ORDNANCE!!!

The Ordnance Corps…

Freedom's Flame!!

Abrams Tank System Maintainer



Bradley Fighting Vehicle System Maintainer

63T
Organizational Level
Hull Mechanic

45T
Organizational Level
Turret Mechanic

63H
DS/GS Automotive
Tracked Vehicle Mechanic

All DS Bradley Tasks

45K
DS/GS Armament
Turret Mechanic

1 DS Bradley Task

63M
On-system multicapable BFV/CFV Mechanic

Self-Propelled Artillery System Maintainer

Consolidation of 45D and 63D

45D - SP Field Artillery Turret Mechanic (ORG)

63D - SP Field Artillery Hull Mechanic (ORG)

Plus all DS Automotive Tasks from 63H & 7 Tasks from 45K

640 soldiers affected

Merged 63D – On System Multicapable PALADIN Mechanic

- **The only other weapon system with a separate hull mechanic and turret mechanic is the PALADIN**
- **Capitalizes on success with Abrams and BFV MCM “On System” mechanics**
- **Mechanics currently performing each other’s jobs anyway – this formalizes what’s already practiced in the field**
- **45Ds already merge with 63D at SSG – eliminates separate career tracks**
- **Simply creates one mechanic that can do the job of two**

Wheeled Vehicle Mechanic

Consolidation of 63B, 63S, 63W

63B - Light Wheel Vehicle Mechanic (ORG)

63S - Heavy Wheel Vehicle Mechanic (ORG)

63W - Wheel Vehicle Repairer (DS)

Merged 63B – Wheeled Vehicle Mechanic

14,948 soldiers affected

- **Does exactly what CSA wants with ADS XXI initiatives**
- **Returns equipment back into the fight faster – reduces evacuation**
- **Significantly increases combat power**
- **Creates one Wheeled Vehicle Mechanic that can perform both Org and DS tasks**
- **Essential to support Two-level Maintenance**
- **Reduces logistics footprint**

Tracked Vehicle Mechanic

Consolidation of 63H, 63Y

63H – Track Vehicle Repairer (DS)

63Y – Track Vehicle Mechanic (ORG)

Merged 63H – Tracked Vehicle Mechanic

3,380 soldiers affected

- **Does exactly what CSA wants with ADS XXI initiatives**
- **Returns equipment back into the fight faster – reduces evacuation**
- **Significantly increases combat power**
- **Creates one Tracked Vehicle Mechanic that can perform both Org and DS tasks**
- **Essential to support Two-level Maintenance**
- **Reduces logistics footprint**

MOSs Already Capable of ORG and DS

27T Avenger System Repairer

27X Patriot System Repairer

35D Air Traffic Control Systems Repairer

35M Radar Repairer

44B Metal Worker

52C Utility Equipment Repairer

52D Power Generation Equipment Repairer

62B Construction Equipment Repairer

63J QM and Chemical Equipment Repairer

Benefits of Merged ORG and DS

Gets rid of maintenance echeloning

- Reduces logistics footprint in the battle space
- Returns equipment back to the fight faster
- Lessens equipment evacuation requirements
- Empowers commanders with more options and flexibility

No longer have to retrain feeder MOSs in NCOES

Increases operational readiness rates

- Reduces repair time - No longer have to job-order all repairs to DS
- Increases productivity → Increases combat power
- Reduces costs in time and fuel when transporting recovery vehicles

Increases Personnel Management Efficiencies

- One soldier to be managed rather than three for assignments and promotions
- Allows commanders to utilize one soldier in more places on the battlefield and in garrison
- Streamlines and cleans-up progression models, data collection, entries and maintenance, special duty selections, training, and authorization

Two-Level Maintenance Summary

- ✓ The time is right to transition to two-level maintenance of Army transformation, as well as the current force
- ✓ Our MOS mergers complement our two-level maintenance vision
- ✓ Expect some force structure savings
- ✓ We believe we can build a transition plan that does not require a lot of

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GO ORDNANCE !

Back up...

Task Decision Diagram